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(54) CATALYST FOR EXHAUST GAS EMISSION CONTROL

(57) Abstract:

PROBLEM TO BE SOLVED: To contrive reduction removal of N₂O and reduction purification of NO_x by arranging NO_x reduction catalyst, for reducing and purifying nitrogen oxide, and N₂O decomposition catalyst, for decomposing dinitrogen monoxide into gaseous nitrogen and gaseous oxygen, on an exhaust gas inflow side and an exhaust gas outflow side, respectively.

SOLUTION: Each of NO_x (nitrogen oxide), reduction catalyst and N₂O (dinitrogen monoxide) decomposition catalyst is arranged in the order from

an upstream side on an exhaust gas duct. NO_x in exhaust gas is reduced by HC and CO in exhaust gas and is sometimes reduced up to N₂ (gaseous nitrogen), but because N₂O decomposition catalyst is arranged on the downstream side of NO_x reduction catalyst, N₂O is further reduced up to N₂ by N₂O decomposition catalyst and is purified. As NO_x reduction catalyst, catalyst that noble metal is supported by a porous carrier can be used, as the porous carrier, alumina and silica can be used and as noble metal, Pt, Rh, Pd, Ir can be used. As a result, N₂O can be efficiently reduced, decomposed and removed.

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